

NOTES:

1. THIS IS A ULTRA- HIGH VACUUM COMPONENT (UHV)
2. WHEN MACHINING VACUUM PARTS, USE OF SILICONE AND SULPHUR-BASED CUTTING FLUIDS IS PROHIBITED. USE ONE OF THE FOLLOWING:
 - A) CIMCOOL 5 STAR 49
 - B) TRIM SOL
3. FINISHING: WHEN MACHINING VACUUM PARTS USE OF ABRASIVE PAPER OR SANDING DISCS, BUFFING OR POLISHING COMPOUNDS, OR RESIN-BONDED GRINDING WHEELS IS PROHIBITED
4. CLEANING: THE COMPONENT MUST BE CLEANED SUCH THAT A UHV PRESSURE OF 1 X 10⁻⁹ TORR CAN BE ACHIEVED
5. HANDLING: THE COMPONENTS SHALL BE HANDLED WITH WHITE SILK GLOVES AND WRAPPED WITH ALUMINUM FOIL TYPE DRY ANNEAL AND UNDER CLEAN ROOM CONDITIONS

6. DIMENSIONS IN [] ARE MILLIMETERS AND FOR REF. ONLY

7. DIMENSIONS IN () ARE FOR REF. ONLY

8. ALL SURFACES MUST BE MACHINED FOR CLEAN UP

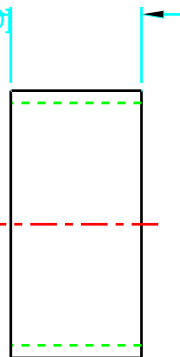
9. DO NOT BREAK SHARP EDGES

10. WELD SHRINKAGE SHALL BE ADDED TO THIS LENGTH

SYM	CHANGE DESCRIPTION	BY	CHKD	DATE
REVISIONS				

SEE NOTE #10

1.05 [26.70]



+.0006 [0.015]
+.0000 [0.000]

1.952 [49.58]

4X R.18 [4.50]

.66 [16.87]

1.328 [33.73]
+.0006 [0.015]
+.0000 [0.000]

1.528 [38.81]
-.004 [0.10]
-.008 [0.20]

.76 [19.41]

1.08 [27.33]
-.004 [0.10]
-.008 [0.20]

2.152 [54.66]

4X R.06 [1.50]

ITEM	DWG/PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY
PARTS LIST				
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES		THIS DRAWING IS THE PROPERTY OF		
TOLERANCES		ARGONNE NATIONAL LABORATORY		
DECIMALS	ANGULAR	LOG NUMBER		
.X - .1 [2.5]	- 0°30'	P4510105-00		
.XX - .01 [0.25]		DRAWN BY		
.XXX - .005 [0.13]		MUSCIA		
SURFACE ROUGHNESS		DATE	CHIEF DESIGN ENGINEER	DATE
125		10/19/98	D. SHU	11/29/98
REMOVE ALL BURRS AND BREAK SHARP EDGES .03 MAX.		CHECKED BY	GP LEADER	DATE
SURFACE TEXTURE TO BE IN ACCORDANCE WITH LATEST ANSI B46.1		J. CHANG	S.M.KUZAY	12/10/98
DIMENSIONING & TOLERANCING IN ACCORDANCE WITH LATEST ANSI Y14.5		DESIGNER	PROJECT MGR.	DATE
		CHANG/MUSCIA		
		RESPONSIBLE ENGINEER	APPROVED/RELEASED	DATE
		J. CHANG		
		MATERIAL	SCALE	
		304 STAINLESS STEEL	1:1	
			SIZE	DRAWING NUMBER
			B	P4-510105-00
			SHEET	
			14	

ADVANCED PHOTON SOURCE
P4-50 INTEGRAL SHUTTER
FOR 32-ID-A
WHITE BEAM STOP
RECTANGULAR TUBE

DO NOT SCALE DRAWING